

# HIGH-PERFORMANCE TRIAXIAL ACCELEROMETERS

## 10 mV/g OUTPUT PER AXIS

ACC301  
\$1570



- ✓ Ideal Vibration Monitoring in 3 (X-Y-Z) Planes
- ✓ Weighs Only 10 g
- ✓ Fast Turn-On Time (1 s)

OMEGA's ACC301 triaxial accelerometer is ideal for lightweight single-point monitoring in 3 (x-y-z) planes. This accelerometer has a low noise floor and a wide frequency range of up to 10 kHz. The ACC301 weighs only 10 g, yet its titanium construction makes it very rugged.

### SPECIFICATIONS

**Excitation:** 2 mA nominal @ 15 to 30 Vdc, constant current

**Rated Output:** 10 mV/g nominal @ 100 Hz per axis

**Frequency Range:** 3 Hz to 10 kHz (up to ±5 % rated output shift)

**Amplitude Range:** ±500 g peak

**Amplitude Linearity:** 2% up to 400 g peak

**Temperature Range:** -55 to 120°C (-65 to 250°F)

**Temperature Sensitivity Effect:**  
-54 to 38°C (-65 to 100°F) ≤5% FS;  
38 to 121°C (100 to 250°F) ≤8% FS

**Thermal Shock:** 3 g/°C

**Transverse Sensitivity:** 5% of axial maximum per axis

**Maximum g Without Damage:** 5000 g peak

**Maximum g Without Clipping:** ±500 g peak

**Mounted Resonance Frequency:** >50 kHz

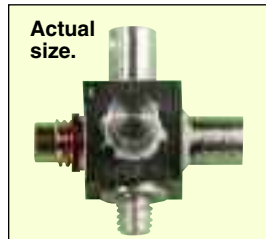
**Output Impedance:** 1000 Ω nominal

**Bias Voltage:** 7V nominal

**Base Strain:** 0.005 g/microstrain nominal

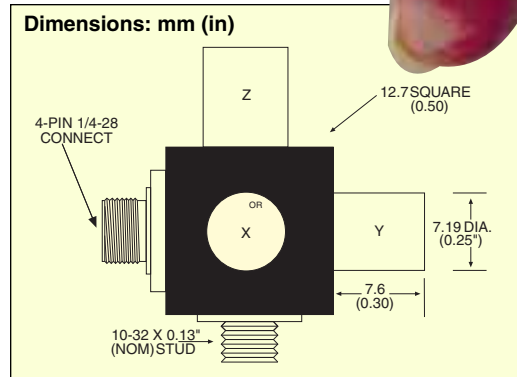
**Noise Floor (Wide Band):** 0.0015 g (rms)

**Weight:** 10 g (0.35 oz) nominal (without cable)



ACC-PS4A power supply, shown smaller than actual size \$595, see page K-17.

ACC-301, \$1570, shown with ACC-CB3-6 cable, \$160, and MAGNET2 magnetic mounting base, \$60.



**Material:** Titanium

**Dimensions:** 19 H x 12.7 mm (0.75 x 0.5") square

**Connector:** 4-pin, 1/4-28 female termination, cable sold separately (order Model No. **ACC-CB3-6**)

**Mounting:** 10-32 removable stud

**Mounting Torque Max:** 22 cm-kg (20 in-lb)

**AVAILABLE FOR FAST DELIVERY!**

To Order (Specify Model Number)		
MODEL NO.	PRICE	DESCRIPTION
ACC301	\$1570	Triaxial accelerometer
ACC-CB3-6	160	1.8 m (6') 4-conductor cable (male/male) <b>required</b>

Comes complete with operator's manual.

**Note:** The compatible meters are for single input only. For multichannel instrumentation, consult the Omega Pressure Department.

### ACCESSORIES

MODEL NO.	PRICE	DESCRIPTION
MAGNET2	\$60	Magnetic mounting base (10 lb holding force) 19.1 Dia. x 19.1 mm high (0.75 x 0.75")

### POWER SUPPLIES

ACC-PS4A	\$595	Triaxial accelerometer power supply/amplifier
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### Interface cables used between power supply and instrumentation

ACC-CB4-15	\$65	4.6 m (15') coaxial cable (BNCM/BNCM)
ACC-CB5-2	35	0.6 m (2') coaxial cable (BNCM/banana plug)
ACC-CB6	15	178 mm (7") coaxial cable (BNCM/pigtail)
ACC-CB3-A	37.50	4-pin female/female adaptor

**Note:** See pages K-16 through K-18 for details on the above accessories.

**Ordering Example:** ACC301, accelerometer, ACC-CB3-6, coaxial cable, ACC-PS4A, power supply, (3) ACC-CB6, coaxial cables, \$1570 + 160 + 595 + (3 x 15) = \$2325.



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